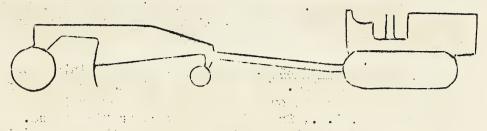
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## VSTRUCTIO



.UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE.

Vol. 1 Washington, D. C. June 29, 1935.

The EDITOR wishes to express his appreciation to the Regions for their fine letters about Construction Hints.

"Thanks" to the Editors of the Service Bulletin for their good wishes. One contribution has been received, but too late for this issue. Other interesting articles are being prepared and will appear in future issues. Anything which has helped you in your work may prove of interest to the others.

DON'T WAIT FOR SOMEONE ELSE TO SEND IN ARTICLES.

Be the first one.

H. L. F.

In this issue and for three following issues, a page of illustrations will be included. These illustrations show various knots, splices and hitches.

The first set includes the following:

Overhand Knot. Used at the end of a rope to prevent unreeving or to prevent the end of the rope from slipping through a block.

Square or Reef Knot. Commonly used for joining two ropes of the same size. The standing and running parts of each rope must pass through the loop of the other in the same direction, i.e., from above downward or vice versa. The reef knot can be upset by taking one end of the rope and its standing part and pulling them in opposite directions. With dry rope a reef knot is as strong as the rope; with wet rope it slips before the rope breaks.

Single Sheet Bend or Weaver's Knot. Used for joining ropes together, especially when unequal in size. It is more secure than the reef knot, but more difficult to untie.

Double Sheet Bend. Used for fastening ropes of unequal sizes, especially wet ones, and is more secure than the single sheet bend.

Thief Knot. Should be avoided as it will not hold. It is commonly mistaken for a reef knot:

Granny Knot. A useless knot that will not hold. It is also very similar to the reef knot.

Region 3 has developed an excellent type of cattle guard, costing approximately \$135.00, installed. The guard is built of railroad rails welded to I-beams. It is in two sections and is not hard to handle when the truck delivers it to the site.

The costs and sizes are approximately as follows:

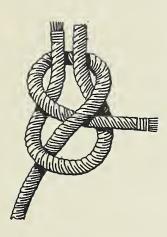
Width 15 ft. Length 8 ft. 4 - I-beams (5 inch) each section 25 lbs. Iron and welding 20 sacks cement \$86.00 16.00 Wire and pipe gate (12 ft.) 7.50 Labor, etc. 25.50



Overhand



Square or Reef



Single Sheet Bend or Weaver's Knot



Double Sheet Bend



Thief



Granny

